I, _____ (print name), hereby certify that I have read and reviewed the Incentive Program System Qualifications. I understand that I am solely responsible for ensuring that these qualifications are met and maintained for the life of my electric generating system and I am responsible for any consequences if they are not met. I understand they are needed for safe operation of my and Mohave Electric Cooperative's electrical system. I also understand if they are not met, I am not eligible for any rebate from Mohave Electric Cooperative and/or AEPCO. Finally, I must submit a receipt or invoice along with this documentation.

Contractor's Name: _____

Contractor's Company: _____

Contractor's Address: _____

_____

Contractor's Phone: _____

Contractor's Signature: _____

Contractor's Lic. Number: _____

Manufacturer/Model of PV System: _____

_____

_____

Manufacturer/Model of Inverter: _____

_____

Number of Panels Installed: _____

System Location: _____

System Rated Output (in watts): _____

Member's Name: _____

Spouse's Name: _____

Member's Address: _____

_____

Member's Phone: _____

Member's Signature: _____

Spouse's Signature: _____

Date: _____

The path to ... a healthier planet.

The path to a cleaner, healthier environment starts with SunWatts™, a program designed to help customers of Arizona's Touchstone Energy® Co-ops take part in renewable electric generation technologies throughout Arizona.

SUN Watts

brought to you by:

MOHAVE electric cooperative
A Touchstone Energy® Cooperative

SUN Watts

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_____5. The Customer System must meet cooperative and Arizona Corporation Commission interconnection requirements for self-generation equipment.

_____6. The Customer System installation must meet the cooperative Service Requirements as follows:

"An AC disconnect means shall be provided on all ungrounded AC conductors and shall consist of a lockable gang-operated disconnect clearly indicating open or closed. The switch shall be visually inspected to determine that the switch is open. The switch shall be clearly labeled stating 'DG Service Disconnect.'"

_____7. All Customer System installations must be completed in a professional, workmanlike and safe manner.

_____8. The rebate amount will be: _____
Rebate formula =($4.00)*(PV Cell Nameplate Rating in watts)*(Number of PV Cells). The maximum rebate amount per customer is $4,000 for residential installation (up to 2,000 watts, or 2 kW) or $20,000 for small commercial installations (up to 5,000 watts or 5 kW).

Incentive Program System Qualifications - On-Grid

All **ON-GRID customer solar electric generating systems** must meet the following system and installation requirements (e.g., systems to be connected to Mohave Electric Cooperative's electric distribution system).

Please have your licensed contractor initial these eight items. Please submit this form to Mohave Electric Cooperative PRIOR to installation.

_____1. The Customer System components must be certified as meeting the requirements of IEEE-929 - Recommended Practice for Utility Interface of Photovoltaic Systems.

_____2. The Customer System Components must be certified as meeting the requirements of UL-1741 - Power Conditioning Units for use in Residential Photovoltaic Power and be covered by a non-prorated manufacturers warranty of at least two years.

_____3. The Customer System design and installation must meet all requirements of the latest edition of the National Electrical Code (NEC), including Article 690 and all grounding, conductor, raceway, overcurrent protection, disconnect and labeling requirements.

_____4. The Customer System and installation must meet the requirements of all federal, state and local building codes and have been successfully inspected by the building official having jurisdiction. To do so, the installation must be completed in accordance with the requirements of the latest edition of the NEC in effect in the jurisdiction where the installation is being completed, including, without limitation, Sections 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to Solar Photovoltaic Systems, thereof, all as amended and superceded.

What is ...

SUN Watts?

Care of our environment is a growing concern among electric cooperative customers. Many folks want a 'green' alternative for their energy needs. That's where the SunWatts™ program comes in.

SunWatts, developed by Arizona's Touchstone Energy® Cooperatives, offers you a way to take part in the exciting and growing renewable and photovoltaic (solar) movement in Arizona. This brochure outlines ways in which you can be a part of SunWatts.

If you have any questions or need additional information, please contact Mohave Electric Cooperative at:

MOHAVE electric cooperative
A Touchstone Energy® Cooperative

(928) 763-1100

Frequently Asked Questions

1.) What is SunWatts™?

SunWatts™ is Mohave Electric Cooperative's name for its renewable energy program. It includes the Incentive and Large-Scale Renewable Generation Programs.

2.) Where does the SunWatts green power come from?

Renewable energy comes from many different sources including photovoltaic (solar) systems, wind and biomass.

3.) How can I enroll?

Residential and small business customers can take part in the Incentive Program.

The Rebate/Incentive program helps you defray the cost of installing a qualifying photovoltaic system in your home or business.

Just fill out the proper enrollment form.

4.) How can I get more information about SunWatts?

Call Mohave Electric Cooperative at (928) 763-1100 and speak with a member services representative to request information and enrollment forms.

6.) Why is Mohave Electric Cooperative promoting green power?

Mohave Electric Cooperative has a commitment to the community and to protecting our environment.

With the SunWatts program, member-customers have an alternative to traditional fossil-fuel power sources, something from which we all benefit.

(5) In order to receive the rebate, you must submit the following to Mohave Electric Cooperative:

- Certification by a licensed electrician that the installed unit meets the qualifications as set out in the Incentive Program Systems Qualifications (page 10).
- Proof of the unit's AC output as determined by an actual test of the AC output capacity of the solar electric system. Failure to have a licensed electrician conduct the installation will result in refusal of rebate.
- A signed Incentive Program Enrollment Form (page 12).
- A copy of the invoice or receipt from the solar dealer.

Keep a copy for your records.

(6) Once this proof is submitted to the cooperative, please allow eight weeks for your rebate to be processed.

**Mohave strongly recommends that the customer, at the customer's sole cost and expense, obtain and maintain a liability insurance policy, providing liability insurance covering the PV system's generation activities and equipment. It's advised that this policy have a combined single limit coverage for injury or death to any person or persons and damage to any property of not less than $1,000,000.*

Rebate processing may take eight weeks. Mohave Electric Cooperative reserves the right to refuse rebate payment based on the following reasons, including but not limited to: failure to meet the qualifications as set forth in the SunWatts Incentive Program System Qualifications, incomplete enrollment packets, insufficient system testing or certification, installation and/or testing/certification by an unlicensed electrician.

Incentive Program

Solar power generators take the sun's rays and turn them into electric energy that can be used for everything from cooling your home in the summertime to keeping you warm in the winter. And by using the sun's resources, we reduce our reliance on fossil fuel-fired electric generation, thus preserving our valuable natural resources.

With the SunWatts™ Incentive Program, you can be on the cutting edge of this exciting technology! Mohave Electric Cooperative will pay you **$4 per installed watt** — up to 2,000 watts for individual residential units, or up to 5,000 watts for small business/commercial units (up to 50% of the total cost of the unit, whichever is lower).

The program is easy!

(1) Select and install a qualifying solar electric system in your home or business. This home or business must be served by Mohave Electric Cooperative. Furthermore, this system must meet all qualifications listed in the following on-grid "Qualifications" section.

(2) For grid-tied systems, you must have a licensed electrician test and certify that the system meets IEEE and the cooperative's interconnect standards (see 'Qualifications' section).

(3) You sign an agreement assigning rights to the environmental credits to Mohave Electric Cooperative. Mohave Electric Cooperative *will not* buy any excess electric generation output from the unit. The rebate does NOT cover battery or backup systems.

(4) You, the owner of the system, are responsible for arranging for and payment of annual service inspections and normal system repairs to the unit, including labor.*

7.) Why does green power cost more than other power?

Renewable energy is still not widely used and is more expensive than traditional sources. As technology improves, use increases and development costs are driven down. Thus, access to renewable fuels should become more economically attractive.

PV Basics

Photovoltaic (PV) systems provide a flexible, 'green' option for customers looking for electric generation systems for their home or small business.

PV systems convert sunlight into electricity. You can find very simple PV cells in watches and calculators. Very complex systems can provide power to homes and even the electric grid.

Applications

PV systems have a number of useful applications, particularly in sunny climates such as Arizona. PV systems can be used to supplement a homeowner's regular electric power and they can also be used in rural areas where it is cost prohibitive to run an electric transmission line to the customer's site or where only a small amount of electricity is needed, such as with water pumping.

Off-grid and On-grid installations

PV systems can be installed either off-grid or on-grid. Off-grid installations refer to those systems that are standalone and are not connected to the Cooperative's electric system. On-grid, or grid-tied, installations are those that tie in directly with the Cooperative's electric grid.

PV Considerations

PV systems do have some drawbacks. They cost more than traditional generation, generally about $7 per installed watt depending on the nature and complexity of the system installed. As an example, a basic PV system for a residence can cost anywhere from $12,000 to $16,000, more if you wish to add storage systems such as batteries.

Also, even though Arizona has an abundance of sun, the excessive temperatures in our desert climate can negatively affect the PV system's output. A licensed, reputable solar contractor can compensate for this degradation in the selection of the PV system.

No two PV systems are exactly alike since no two installations have exactly the same needs. Much depends on the size of the home or business consuming the electricity and if there is a back-up storage system, which have additional safety considerations. Only a licensed solar contractor can advise you as to the actual costs of the system that is right for your needs.

Components of a PV system

In a typical PV system, you will find a PV array and a control center containing a DC to AC inverter. Some people choose to add batteries to their system so that they can store the unit's output and use it at night.

The PV Array

PV arrays collect the sun's rays and convert them into energy. There are a variety of PV arrays to choose from. Some are fixed; that is, they do not move or track the sun throughout the day. Some are tracking units that actually move with the sun as it moves across the sky during the day or throughout the season. Some are mounted at ground level where others are mounted on buildings or elevated structures.

It's important that the PV array be designed to meet wind load requirements of the area. An improperly installed PV system could be destroyed in a wind storm, therefore wind load is important. Wind load depends on the size of the array and the tilt angle of the array. A licensed solar contractor can assist with determining wind load.

PV arrays generally have an expected life of 15 to 20 years.

The Control Center

Electronic controllers, inverters and any necessary switches, fuses and additional components can be found in the Control Center. These components should be able to withstand high temperatures and weather, as well as carry the proper certifications.

Below is a simple illustration of a basic PV system. An actual system may have more components depending on whether the customer wishes to connect to the grid, in which case safety mechanisms must be installed. A customer may also wish to add a battery system for nighttime power, which also has safety and interconnect requirements. Your licensed solar contractor can assist you in determining what will work best for you.